

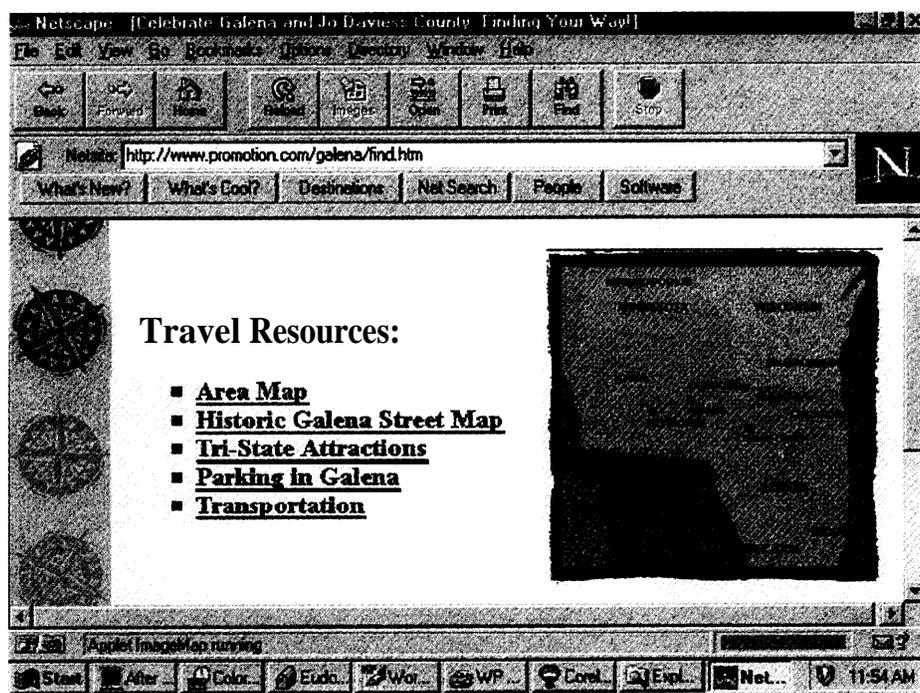


United States Department of Transportation
Federal Highway Administration
Federal Transit Administration

Technology in Rural Transportation “Simple Solution” #6

ENTER@PRISE

Traveler Information on the Internet



Introduction: This application was identified as a promising rural Intelligent Transportation Systems (ITS) solution under a project sponsored by the Federal Highway Administration (FHWA) and the ENTERPRISE program. This summary describes the solution as well as opportunities for expansion into the broader context of rural ITS.

Technology Overview: More and more agencies are providing some form of traveler or tourist information on Internet web sites. These agencies include states, cities, counties, Chambers of Commerce, and private organizations, for example, associations of innkeepers. Not only is this type of service relatively cheap to provide and maintain from the agency perspective, it is also available at very low cost to the end user, assuming they have access to a PC, modem, and the necessary software. Information provided varies widely and can range from general information concerning a state or region, through to detailed information about specific accommodations, restaurants and parking facilities, for example.

Real-World Example - City of Galena, Illinois, and City of Decorah, Iowa, Web Sites

Overall goal: To disseminate information about local area attractions to potential visitors and new residents, including, for example, local food and lodging information.

Technical approach: Various small cities have developed web sites to promote local attractions and to provide tourist and traveler information to visitors. The City of Galena, Illinois, web site provides directions to Galena, and information on restaurants, parking, local historic and natural attractions, performing arts, Mississippi river boat cruises and casinos, shopping, outdoor recreation, and guided tours. The Chamber of Commerce (COC) of the city of Decorah, in north-east Iowa, has produced a web site that provides information about local weather, businesses, organizations, churches, parks, city offices, and a list of local restaurants and hotels.

Current status: The Galena web site has been operational since August 1995, and can be accessed at <http://www.promotion.com/galena>. The Decorah web site is on-line at <http://www.salamander.com/~decorah/>.

Location / geographic scope: The pages provide information about Galena and Jo Daviess County and the City of Decorah and its environs. They can be accessed from around the world.

Agencies involved: The Galena / Jo Daviess County Convention & Visitors Bureau (CVB) site was designed and created by Anne Holmes & Associates. The Decorah COC also contracted with a service provider to create its site.

Cost information: The City of Galena funds the site by charging a small fee for each business that is promoted on the site. Decorah's site cost just over \$2,000 to design, and costs \$100 a month to maintain, funded by the COC.

Key contact: For the Galena site, Stephen Holmes, Anne Holmes & Associates. 1-800-HOLMES-3. For the Decorah site, Richelle Holsen-Jeremiah, Decorah COC, 1-800-4NE-IOWA.

Have goals been achieved? In the first 12 months that the Galena web site was operational, the CVB reported a 60 percent reduction in the amount of printed informational materials that they mailed to enquirers. This has been attributed to potential visitors accessing the Internet site for information. The site is experiencing a 10 percent increase in new users each month, with about 1,500 new visitors to the site per month at present. The Decorah COC reports that they have had a good response to the site, both in terms of the numbers of users accessing it and the feedback they have received from users.

Solution timeline: Several new features are scheduled to be available at the Galena site in January, 1997, including more maps and photographs of Galena and the surrounding area. Features will be added to enable the CVB to update information themselves. In addition, a database search function will be added to enable users to identify events in which they are interested.

Further Description of Application

Additional technologies may include: This type of information service is ideal for providers, as information can be disseminated very cost effectively, lessening the need to dedicate staff to a telephone information service. The system is also very convenient and cheap for existing PC users. However, providing the information via other technologies in parallel could enable non-PC users / owners to benefit also. These technologies could include information kiosks installed either at rest areas or other locations within the area of interest, or at other regions' tourism offices, including the travelers' home city or state. Information kiosks could also be provided at travel agencies, airports, car rental locations, transit hubs, etc.

Potential additional uses for this technology may include: Various options exist for increasing the sophistication of services offered via the Internet, including:

- Traveler / tourist information tailored to a specific route, such as a planned or potential vacation route. Users could enter an origin and destination within a state or region and be offered a variety of attractions and activities, accommodations, and restaurant options within a specified distance of their main route.
- Traveler / tourist information tailored to the needs of specific travelers, such as their budget, whether they are looking for a children-oriented vacation, or any special interests or mobility needs they may have.
- Reservation facilities could be offered to travelers enabling them to remotely book and pay for accommodations, special events, excursions, and restaurants, for example.

Additional information types could also be provided, if information is available at reasonable cost and if any required inter-agency agreements can be reached, to offer road and weather condition information and information on construction and maintenance activities likely to affect the traveler on their route. As travelers would mainly consult the Internet information service prior to departing on their trip, real-time weather and congestion / incident information would likely not be useful due to its time-sensitivity.

Benefits of Application

	Benefits to travelers	Benefits to the community	Benefits to the public sector
Direct benefits	Cheap, easy access to information at any time of the day, week or year.	Stimulates focal economies, bringing tourist revenue into a city or region, and promoting local businesses to residents	Cost effective supplement to existing tourism information services
Indirect benefits	Sites often have links to neighboring cities / regions providing easy access to a wide range of information sources		Promotes local transit, traveler services, and parking facilities

Probable Implementation Process

Step One: Interested agencies must determine that sufficient demand exists or could be created for an Internet information service for their area of coverage. If a telephone information service already exists, this could be done by asking each caller a few questions about their access to a PC and Internet software, and whether they would find such a service useful. If no such service already exists, other types of market research could be performed, with varying degrees of complexity depending on the agency and the funds available. For example, agencies could survey other similar agencies on the success and scope of their Internet information services.

Step Two: Agencies should define the type and the level of detail of information that will be provided to users. This is likely to be impacted by the resources that are available to establish and maintain the service and whether local businesses will be charged to be promoted through the service.

Step Three: Depending on the findings of the previous step, the agency should determine whether the expertise required to establish and maintain the service is available within their organization, or whether it would be cost-effective to acquire this expertise in-house. If so, the agency could proceed to Step Five.

Step Four: If the agency does not have the resources to develop the Internet service in-house, or prefers to hire a specialist to create the site, it then needs to identify and contract with an appropriate service provider.

Step Five: Working with the Internet service provider, if applicable, the agency should design, implement and test their service based on the findings of Step Two. In order to ensure maximum visibility and use of the system, the agency should ensure that links to neighboring, regional, or state sites are created wherever possible.

Step Six: This last task involves ongoing operation and maintenance of the Internet service. It may be that once the system is fully functional, routine updating of information could be performed in-house, only calling upon professional Internet services to assist with major redesign efforts. As part of this step, the agency should request and analyze user feedback to ensure that the users' needs continue to be met by the service.

Potential Implementation Issues The agency should consider existing services which are offered by neighboring cities or regions, as there may be usability benefits from designing a service which is structurally and visually coherent with other services, while not infringing copyright or intellectual property rights.

It is likely that such an Internet service would supplement a parallel telephone-based traveler information service. If this is not the case, the agency should consider supplying a help-line for users who experience difficulties with the service, or for users who would prefer to deal with an operator to obtain additional information or assistance.

When deciding to deliver an Internet information service, the agency should be sure not to underestimate the effort required to maintain the service and keep all information current. If the site is not maintained adequately, the service and the agency could lose credibility with users.

Solution's Contribution to Broader Rural ITS Developments This solution is an example of a region-wide dissemination system that, when used in conjunction with other data collection and information processing systems, will play a role in the following rural intelligent transportation system components:

Personal Mobility Management - This solution can help manage and promote existing systems for increased personal mobility.

Regional Traveler Information - This solution can serve as part of a regional information system, disseminating general information or alerting motorists of upcoming events.

The Technology in Rural Transportation: "Simple Solutions" Project: This project was performed within the ENTERPRISE pooled-fund study program, and aimed to identify and describe proven, cost-effective, "low-tech" solutions for rural transportation-related problems or needs. "Simple solutions" studied within the project focussed on practical applications of technologies, which could serve as precursors to future applications of more advanced systems, or intelligent transportation systems (ITS).

More than fifty solutions were initially identified and documented. Of these, fourteen solutions were documented and analyzed in detail. The transportation technology applications were also categorized according to the seven Critical Program Areas (CPAs) defined within the U.S. Department of Transportation's Advanced Rural Transportation Systems Program. It is hoped to utilize the information gathered within this study to perform outreach to local level transportation professionals to introduce them to ITS and its potential benefits.

For More Information: A full report on this study is available from the FHWA R&T Report Center, telephone no. 301-577-0818. **Title:** Technology in Rural Transportation: "Simple Solutions." **Publication No.:** FHWA-RD- 97-108. This research was conducted by Castle Rock Consultants, Eagan, Minnesota. For more information, contact Paul Pisano of FHWA, HSR-30, 703-285-2498. For more information about ENTERPRISE, contact Bill Legg, Washington State DOT, 206-543-3332.